



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue  
Seattle, Washington 98101

January 2, 2002

IDA518  
1/2/02  
17a

FMC  
1/2/02

Reply To  
Attn Of: WCM-121

**VIA FAX and CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

9784

FILE COPY

Mr. Rob J. Hartman  
FMC Corporation Pocatello Plant  
Highway 30 West  
P.O. Box 4111  
Pocatello, Idaho 83202

RE: *United States of America v. FMC Corporation*, No. CIV 98-0406-E-BLW (D. Idaho),  
RCRA Closure Plan for Pond 18 Cell A

Dear Mr. Hartman:

FMC submitted a closure plan for Pond 18, dated August 2001. The US Environmental Protection Agency (EPA) provided the public with an opportunity to review and comment on the plan. The comment period began on October 4, 2001 and closed on November 16, 2001, and EPA received a number of comments from the public, as well as from the Shoshone-Bannock Tribes. EPA has considered those comments and a response to the comments will be provided to the Tribes and to the individuals that submitted comments, as well as to other interested parties upon request.

Pursuant to Paragraph 9.b of Attachment A, Section I, of the *United States of America v. FMC Corporation* Consent Decree referenced above, as modified on October 4, 2001 (the Consent Decree), "FMC shall complete placement of the initial fill and temporary cover on Pond 18 Cell A during the first construction season following the year in which EPA approves, by December 15, the initial component of the closure plan." FMC in a letter to EPA dated December 13, 2001, agreed to change the December 15 date to January 2, 2002. EPA requested this extension to allow time for EPA review of comments received from the Tribes and the public, and to review FMC's responses to EPA's November 8, 2001 Notice of Deficiency on the closure plan. FMC submitted responses to the Notice of Deficiency on December 13, 2001 and December 21, 2001.

EPA hereby approves, with the modifications specified in the enclosure to this letter, the removal of water and placement of the initial fill and temporary cover over Pond 18 Cell A, which shall include the installation and operation of temporary gas monitoring and extraction piping, in accordance with sections 7.2.1, 7.4.6, 8.6.2, and 8.7 of the August 2001, Volume 1-Cell A, Pond 18 Closure Plan. In accordance with Paragraph 9.b. of Attachment A of the

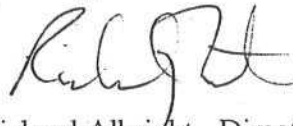
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Consent Decree, FMC shall complete placement of initial fill and temporary cover and the installation of temporary gas monitoring and extraction piping during the 2002 construction season. Removal of water shall continue in accordance with the approved provisions of the closure plan until settlement criteria are met.

This letter does not constitute approval of the other components of the closure plan, including the plan and schedule for closing Cell B. FMC shall continue to comply with the Pond Management Plan, incorporated into Attachment A of the Consent Decree, for continued operations at Cell B.

If you have any questions, please contact Linda Meyer at (206) 553-6636.

Sincerely,



Richard Albright, Director  
Office of Waste and  
Chemicals Management

Enclosure

cc: Blaine Edmo, Chairman, Fort Hall Business Council  
Susan Hanson, CERCLA/RCRA Program, Shoshone-Bannock Tribes  
Jeanette Wolfley, Attorney's Office, Shoshone-Bannock Tribes  
David Heineck, Summit Law Group



Enclosure to Letter, dated January 2, 2002, Approving Initial  
Phase of Pond 18 Cell A Closure

Modifications to the August 2001 Closure Plan

- 1) Section 1, Page 1-1, the third sentence in the fifth paragraph of Section 1 is revised to read as follows: "Any hazardous liquid wastes removed from Pond 18 during the Cell A closure activities or generated from closure equipment decontamination will be sent to a new on-site water treatment facility, or otherwise managed in accordance with RCRA requirements."
- 2) Section 2.3.1, page 2-4, third paragraph, the fifth sentence in the third paragraph is revised to read as follows: "Prior to installation of lime treatment, all samples were taken from the pipeline at the furnace building prior to the precipitator slurry being transferred to surface impoundments." In addition, the following sentence is added to the end of the paragraph: "Samples taken from Tanks V-3600 and V-3800 are representative of the wastes placed in Pond 18."
- 3) Section 2.3.2, page 2-5, the following sentence is added to the end of the last paragraph in Section 2.3.2: "The allowable leakage rate (ALR) for the pond, established in accordance with 40 CRF 265.222(a), is 1750 gallons/acre/day (gpapd)."
- 4) Section 2.3.2, page 2-7, The following paragraph is added to the end of Section 2.3.2: "Nylon netting was placed over the pond to prevent birds from landing on the water. The nylon net is supported by and tied to a grid of steel cables spaced at four-foot intervals. The steel cables are tied to a 36-inch diameter pipe which is set on the pond dike and extends completely around the pond. The 36-inch pipe is secured to deadman anchors located outside of the pond area to resist the tensile forces in the cables that support the bird netting, except for the north side where the perimeter pipe is attached with cables to the Cell B bird netting perimeter pipe. The bird netting is overlain in turn by a second set of steel cables that run only in the short direction of the pond and provide further restraint to the nylon netting."
- 5) Section 2.3.3, page 2-7. The following sentences is added to Section 2.3.3: "The pumping rate from the LCDRS sump has never exceeded the action level of 50% of the ALR, with an average rate for the year 2000 of 0.015 gpapd, and a total volume pumped from November 11, 1998 through October, 2001 of 18.8 gallons. There is no evidence that the bottom liner has been breached."
- 6) Section 4.2, page 4-4 the portion of the second sentence of the third paragraph of Section 4.2 which reads "After completion of the closure activity" is changed to read "After installation of the final cap."
- 7) Section 6.1, the first bullet is revised to read; "Remove, decontaminate as necessary, and dispose of bird netting over Cell A. The bird netting over Cell B shall be disconnected from Cell

*Feb 3 - Pond 17 Approval  
Pond 18 Phase 1 Approval -  
fml.  
Phase 1A - fml*

A and left in place until final closure of Cell B.”

8) Section 6.6, Page 6-7, the last sentence of Section 6.6 is revised to read as follows: “Therefore, Astaris will review the schedule to finalize the specific calendar days for the closure activities, notify EPA and the Tribes at least 30 days prior to beginning closure, and proceed with the closure as planned.”

9) Section 6.6.1, Page 6-7, the following sentence is added to Sections 6.6.1; “The results of inspections, monitoring activities, and water quantities related to the LCDRS during closure and post-closure shall be maintained at the facility in the Health, Safety, and Environmental Department files.”

10) Section 6.7, page 6-9, last paragraph. The following sentence is added to the beginning of the last paragraph in Section 6.7: “Astaris will notify EPA within five working days of any unexpected events that would affect the closure plan and/or might require an amendment to the plan.”

11) Section 7.2.1, page 7-28, last paragraph is revised to read as follows: “The existing leak detection system will continue operating during closure and post-closure. The system will be maintained, inspected, and monitored per Appendix A Sections 9.0 and 10.0 of the RCRA Pond Management Plan (September 1998) and in accordance with 40 C.F.R. § 265.226 and 40 C.F.R. § 265.228. The LCDRS sump discharge piping will be disconnected from the current header pipe and rerouted to a pumping system prior to the pond closure dewatering activity. Any water in the system will be removed and sent directly, via the pumping system, to a new on-site water treatment facility or otherwise managed in accordance with RCRA requirements.”

12) Section 8.1, page 8-1 and Section 8.6.2.2, page 8-8, the second bullet is revised to read, “Manage, remove and relocate portions of the FT-IR system and plug the overflow pipe to Cell B,” and “Management, removal and relocation of the FT-IR system and plugging of the overflow pipe to Cell B,” respectively.

13) Section 8.6.2, page 8-6, the last sentence of this paragraph is revised to read: “Initial backfill refers specifically to the backfill placed in Cell A extending from the top of the pond solids to below the final cap.”

14) Section 8.6.2.2, page 8-8, The sub-section entitled “Bird Netting Removal” in Section 8.6.2.2 is revised to read as follows: “Bird Netting Removal. To provide access to the pond area for backfilling, the bird netting system will be removed, decontaminated if necessary, and disposed of appropriately. Prior to removing the bird netting from Cell A, new anchors for the Cell B bird netting will be installed in the dike between the two cells. The bottom steel cable grid will support the removal of the upper steel cables and the bird netting and will prevent them from coming in contact with the waste. Similarly, the longitudinal cables of the bottom cable grid are supported on the lateral cables and can also be removed without contacting the waste. However,



the lateral cables are unsupported and it may be difficult to safely prevent them from dropping into the pond sludge during the removal process. These cables are basically wire ropes and it may be difficult to remove wastes that become entrapped within the spaces between the individual steel strands of the cables. Therefore, any components of the bird netting system that cannot safely be removed and/or decontaminated will be left within the area enclosed by the pond dikes and within the pond sludge. All other components of the bird netting will be disposed of according to applicable RCRA requirements as described in Section 8.11.3."

15) Section 8.6.2.2, Page 8-9. The future location of the Pond 18 FT-IR units identified on the attached Figure 8-1 is added to Section 8.6.2.2. The second paragraph of this section is replaced with; "It is anticipated that the FT-IR units may potentially interfere with widening of the perimeter dikes to accommodate the sewing and staging of the geofabric, and the conveyor equipment for the initial fill placement, at which time the units may have to be removed. The units will be relocated and reinstalled as indicated in Figure 8-1 (attachment 1), to monitor Cell B. During periods where the FT-IRs are inoperable, monitoring will continue to be performed by the construction work crews. Each work crew performing work in the pond area will have a personal phosphine monitor and work rules for all pond closure activities will be in full conformance to the requirements of the Plan Worker Safety Procedure as outlined in the RCRA Pond Management Plan, incorporated into Attachment A of the Consent Decree (PMP) and the Task-Specific Health and Safety Plan for Pond 18 (Appendix E of the Pond 18 Closure Plan). The personal phosphine monitor(s) have been and will continue to be a far more effective method for monitoring personnel exposures and taking appropriate action to minimize worker exposures. During periods when the FT-IRs are inoperable, concentrations of phosphine that reach 3.0 ppm or concentrations which remain between 1.0 and 3.0 ppm for more than 5 minutes in the pond area detected by monitoring performed by the construction crews using phosphine monitors shall require fenceline monitoring in accordance with Section 3.3.2.3 of the PMP as revised below.

While Cell A contains open water covering the pond solids FMC shall continue to comply with the following sections of the PMP and take measures as necessary to deter avian intrusion into the pond: 3.1.1.1, 3.2, 3.2.1, 3.2.1.1, 3.2.1.2, 3.2.3, 3.2.3.1, 3.2.4, 3.3, 3.3.2, 3.3.2.1, 3.3.2.2, 3.3.2.3 as revised in attachment 2, 3.3, 3.3.3 as revised in attachment 3, 3.3.5, 3.3.7, 3.5, 3.5.1, 3.6, 3.6.1, 3.6.1.1, 3.6.1.2, 3.6.1.3, 3.6.1.4, 3.6.1.6, 3.6.2. Once the temporary cover is in place on Cell A, FMC shall comply with sections: 3.1.1.1, 3.2.1.1, 3.3, 3.3.2, 3.3.2.1, 3.3.2.2, 3.3.2.3 as revised in attachment 2, 3.3, 3.3.3 as revised in attachment 3, 3.3.7, 3.5, 3.5.1, 3.6, 3.6.1.3, 3.6.1.4, 3.6.1.6, 3.6.2. FMC shall submit FT-IR quarterly reports prepared in accordance with the FMC Open Path FTIR Air Monitoring System for Ponds 16S, 17 and 18 approved by EPA on June 9, 1999 pursuant to section 3.3.5 of the PMP, which shall include the information specified in attachment 4.

16) Section 8.6.2.2, Page 8-10, The paragraph for "Perforated PVC Piping and Sand Bedding" in Section 8.6.2.2 is modified to read as follows: "As the initial sand and slag fill will be covered with a temporary impermeable geomembrane, a contingent system of perforated PVC piping, described in Section 7.1.4.1, will be installed beneath the geomembrane to collect any potential

gas build-up underneath the temporary cover. FMC shall submit to EPA and the Shoshone-Bannock Tribes a plan for: a) determining if phosphine and other gases have accumulated under the temporary cover and, b) for extraction and management of such gases. This plan must be submitted to EPA and the Shoshone-Bannock Tribes within 30 days of this approval. FMC shall implement the plan as approved or modified by EPA.

18) Section 8.11.2, page 8-16, the second sentence is changed to read as follows: "Any hazardous liquid wastes removed from Pond 18 or generated from closure equipment decontamination will be sent to a new on-site water treatment facility, or otherwise managed in accordance with RCRA requirements.

19) Section 10.3, Page 10-8, the first paragraph is revised to read as follows: "The Interim Status inspections, calculations and Response Action Plans as defined in the Pond Management Plan (September 1998) will be continued during closure and post-closure to comply with 40 C.F.R. § 265.222(c) and 40 C.F.R. 265.223, Response Actions. The leak detection observation well-sump will be inspected as required by 40 C.F.R. § 265.226 and 40 C.F.R. § 265.228 and within 48-hours after each 25-year storm event. The results of inspections, monitoring activities, and water quantities related to the LCDRS during closure and post-closure will be maintained at the facility in the Health, Safety and Environmental Department files. Water will be removed from the leachate collection sump and disposed of as described in Section 8.11.2. The Interim Status inspections, calculations and Response Action Plans will be continued during closure and post-closure to comply with 40 C.F.R. § 265.222(c) and 40 C.F.R. § 265.223, Response Actions. The LCDRS will be maintained and monitored per Appendix A of the RCRA Pond Management Plan (September 1998) and in accordance with 40 C.F.R. § 265.226 and 40 C.F.R. § 265.228. The leak detection observation well-sump will also be inspected in accordance with 40 C.F.R. § 265.226 and 40 C.F.R. § 265.228 during the post-closure period.

20) Appendix E, Page 5, Table E-1

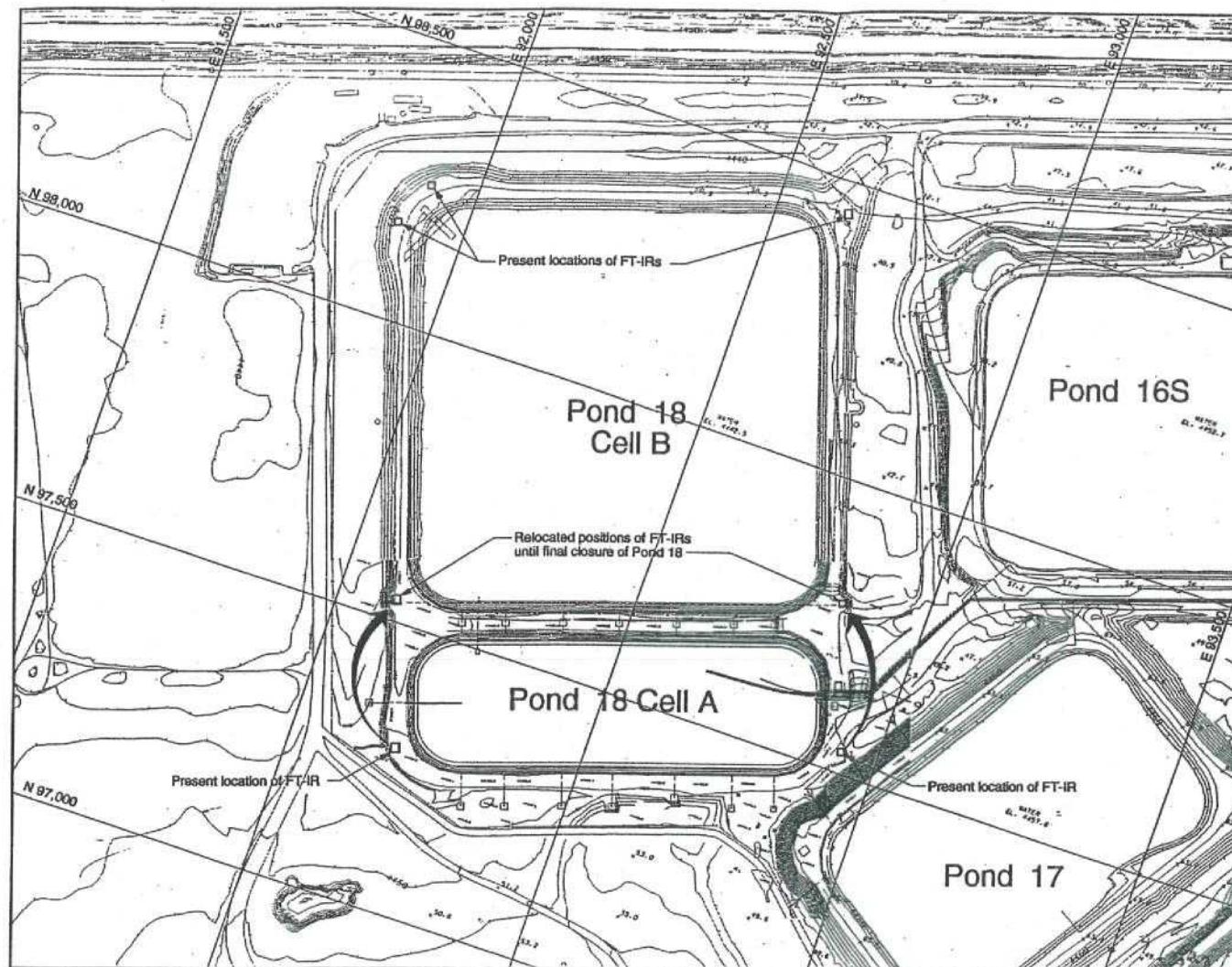
Hydrogen cyanide must be added to the chemicals that may be present at Pond 18.



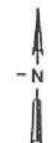
# ATTACHMENT 1


## Notes

- The FT-IR units located at the southwest and southeast corners of Cell A will be relocated to the southwest and southeast corners of Cell B during placement of the initial fill in Cell A. All five FT-IR units will be removed by completion of closure of Pond 18.



0 100 200 300 400 Feet



BECHTEL ENVIRONMENTAL, INC. SAN FRANCISCO			
ASTARIS IDAHO, LLC POCATELLO, IDAHO			
Pond 18 FT-IR RELOCATION PLAN			
	Job Number	Drawing No.	Rev.
	24230	Figure 8-1	0

Reference: Vertical Datum is Mean Sea Level.  
Horizontal Datum is North American Datum 1983.

Pond 18 Closure Plan - Cell A

December 2001



## Attachment 2

### **3.3.2.3 Threshold Levels and Response Actions at the Fenceline and Off Site**

This section describes the threshold levels for initiating offsite monitoring and response actions in the event that action levels are equaled or exceeded. FMC shall inform the Power County Sheriff, the Idaho State Police, the Union Pacific Railroad, the Idaho State Emergency Response Center, and the Shoshone-Bannock Tribes Department of Public Safety of these monitoring and response procedures by September 30, 1998.

#### **Overview of Offsite Response Procedures**

FMC shall monitor phosphine and hydrogen cyanide levels at three points along Highway 30 whenever the concentrations of either of these compounds along the fenceline south of Highway 30 equal or exceed threshold screening levels (0.33 ppm for phosphine and 9.8 ppm for hydrogen cyanide). If phosphine levels along Highway 30 equal or exceed a 1-hour response action level of 0.25 ppm (or hydrogen cyanide equals or exceeds 7.1 ppm), FMC shall escort any pedestrians, joggers, persons stopped or working along the adjacent area, train switchers, and stranded or stopped motorists from the area along the highway.

These phosphine and hydrogen cyanide action levels are proposed federal guidelines referred to as Acute Exposure Guideline Levels (AEGLs). The guideline values for phosphine were published by the EPA on October 30, 1997 (62 FR 58840), and the guideline values for hydrogen cyanide were subsequently developed and made available for public review. These proposed hydrogen cyanide values were made available at a public meeting (see 62 FR 27733). The Highway 30 response action levels are based on a potential 1-hour exposure period; these levels may be amended, with the approval of EPA. The fenceline threshold screening levels were calculated using the EPA SCREEN3 dispersion model to predict concentrations that would not exceed 0.25 ppm phosphine and 7.1 ppm hydrogen cyanide at Highway 30. This model takes into consideration the dispersion (i.e., dilution) that occurs as air flows from the fenceline north of Pond 16S and Pond 18 to Highway 30 (a minimum distance of approximately 86 meters). The fenceline threshold levels were calculated for low wind speeds and stable atmospheric conditions; these conditions would tend to minimize the amount of dilution of phosphine and hydrogen cyanide between the ponds and the highway.

#### **Fenceline Monitoring and Response Procedures**

As noted in Section 3.3.3, phosphine levels are measured every 4 hours at six locations along the northern fenceline, at two locations west of the RCRA pond area, at two locations south of the pond area, and at two locations east of the pond area. Additional measurements shall be made at Sites 1 through 6 as soon as practicable, but no longer than 30 minutes after phosphine levels equal or exceed 3.0 ppm (or remain between 1.0 and 3.0 ppm for more than 5 minutes) in the pond area. If hydrogen cyanide levels equal or exceed 10 ppm in an area within the RCRA pond area, hydrogen cyanide levels will be measured at fenceline locations 1 through 6 using Draeger tubes (or comparable equipment) as soon as practicable but no longer than 30 minutes later.



After discontinuing monitoring of phosphine or hydrogen cyanide at the fenceline or offsite because levels at those locations drop below the threshold requiring further action, FMC staff shall recheck phosphine or hydrogen cyanide levels at the ponds. If phosphine levels remain at or above 1.0 ppm or hydrogen cyanide levels remain at or above 10 ppm in the pond area, additional measurements shall be initiated at Sites 1 through 6 within thirty minutes.

Phosphine measurements are routinely made using a direct-reading personal phosphine monitor. Because this instrument is cross-sensitive to hydrogen cyanide, it is possible that the phosphine concentration recorded by the instrument is greater than the concentration of phosphine actually present in the air. Consequently, whenever the direct-reading personal phosphine monitor records a level equal to or exceeding target levels, either along the fenceline or off site, the FMC technician taking the measurement will immediately make a confirmation measurement using phosphine and hydrogen cyanide detector tubes, such as those manufactured by Draeger, and the resulting measurements will be used in place of the direct-reading personal phosphine metering data. Monitoring data indicating concentrations equal to or exceeding phosphine or hydrogen cyanide threshold levels at the fenceline shall be included in the status reports on pond operations described in Section 3.6.2. The DBT Environmental Chief shall radio (or phone) the Pond Security Guard to prevent entry into the affected pond area without adequate PPE when confirmed concentrations above the thresholds described in the first paragraph of this subsection are observed. The DBT Environmental Chief shall also notify the Security Guard.

#### **Offsite Monitoring and Response Procedures**

Monitoring of phosphine and hydrogen cyanide levels along Highway 30 shall be initiated if the confirmation sample at any northern fenceline monitoring point (i.e., Sites 1 through 6) equals or exceeds the phosphine threshold level of 0.33 ppm or the hydrogen cyanide threshold level of 9.8 ppm. The first offsite measurement shall be made within 15 minutes unless access is delayed by factors outside of FMC's control, in which case the measurement will be taken as soon as possible. The first offsite measurement shall be made at Site A, as shown in Figure 3-2. The direct-reading personal phosphine monitor shall be initially used in taking these measurements.

If the phosphine measurement obtained with this monitor equals or exceeds 0.25 ppm at Site A, B, or C, a confirmation sample shall be immediately collected at the relevant monitoring site using a detector tube (e.g., Draeger tube). Once sampling at the first location is completed, including confirmation sampling, the Security Officer (or alternate FMC personnel) shall drive to the next site in sequence, where an initial phosphine measurement shall be obtained using the personal phosphine monitor. Should the initial phosphine level equal or exceed 0.25 ppm at any location, a confirmation measurement shall be collected using a detector tube. This process shall be continued through Site C, whereupon the Security Officer (or alternate FMC personnel) shall immediately repeat the sequence of offsite measurements, beginning with the

first location and will continue to repeat these measurements as provided below in the section on Communication and Continued Surveillance. The Security Officer shall maintain radio contact with the Shift Manager while collecting these measurements.

#### **Data Assessment along Highway 30**

The Security Officer (or alternate FMC personnel) shall average the confirmatory phosphine measurements at each location and average the confirmatory hydrogen cyanide measurements at each location. If, at any time at any location, the average phosphine concentration equals or exceeds 0.25 ppm, or the average hydrogen cyanide concentration equals or exceeds 7.1 ppm, the Security Guard or the other FMC personnel shall advise any individuals within the area of potential exposure and escort them out of the area of potential impact. If a train is idling on the Union Pacific Railroad line in the vicinity of the above threshold readings, the Security Officer shall advise the engineer by radio to move the train out of the area. Immediately after initiating these actions, but in no event later than 30 minutes, notice shall be made of the confirmed exceedance of phosphine or hydrogen cyanide threshold levels at Highway 30 to the Shoshone-Bannock Tribes, EPA Region 10 (RCRA Compliance Unit Manager), and, if assistance is required, the Power County Sheriff. The same data may also be forwarded to these parties by email.

#### **Communication and Continued Surveillance**

Whenever phosphine or hydrogen cyanide levels are being monitored along Highway 30, the Security Officer (or alternate FMC personnel) shall communicate these data to both the Shift Manager and the DBT Environmental Chief. The DBT Environmental Chief (or alternate FMC personnel) engaged in monitoring phosphine levels along and near the RCRA Ponds shall similarly communicate these data to the Shift Manager and the Security Officer.

When phosphine and hydrogen cyanide concentrations in the RCRA pond area and at the fenceline remain below the threshold levels specified in Table 3-2, the DBT Environmental Chief shall relay the status to the Pond Security Guard and the Security Officer. The Security Officer (or alternate FMC personnel) shall continue offsite measurements and surveillance of Highway 30 until two consecutive sets of measurements taken in the sequence described above indicate that phosphine levels are less than 0.25 ppm (and hydrogen cyanide levels are less than 7.1 ppm) at each of the Highway 30 locations (Sites A, B, and C). Offsite monitoring and surveillance shall be discontinued when this condition is reached, unless otherwise directed by the Shift Manager or as requested.



**3.3.3 FMC Shall Continue A Fenceline Monitoring Program for Phosphine and Hydrogen Cyanide**

FMC shall continue to monitor phosphine levels every 4 hours at the facility fenceline north of the RCRA pond area. Monitoring shall be conducted at locations 1 through 12 specified on Figure 3-2 by the DBT Environmental Chief as part of the routine RCRA pond area surveillance, which occurs every 4 hours, day and night, 7 days a week. The DBT Environmental Chief shall use phosphine monitors (manufactured by MST Measurement Systems), and record monitoring data, include the date and time of each measurement on a form. Monitoring equipment providing comparable or better performance may be substituted for the named equipment in the future.

The DBT Environmental Chief shall complete the data sheet by entering the meter reading for each location, and the time of the reading. The DBT Environmental Chief shall also record on the form the results of all confirmatory tests and the time when each measurement was made. Similarly, the DBT Environmental Chief or other person conducting offsite monitoring shall record the time and meter reading or confirmatory test result for each offsite location. The DBT Environmental Chief shall sign and date the form(s) and submit it (them) to the Environmental Technician (by placing the form in the Environmental Technician's mail box) on a daily basis.

## FT-IR AIR MONITORING SYSTEM QUARTERLY REPORTS CONTENTS

1. Introduction
2. Maintenance summary
3. Data Presentation and Analysis
  - a. Summary of quarterly data
  - b. Phosphine [ $\text{PH}_3$ ] and hydrogen cyanide [HCN] exceedances based on hourly averaged data [discussion, table and figures]; the table shall show all instances when  $\text{PH}_3$  exceeds 1.0 ppm or HCN exceeds 10 ppm, and for each instance, provide information on location, date and time, concentration, wind speed and direction, temperature, and response actions taken.
  - c. Specific data analysis: discussion of 5 min exceedance data for  $\text{PH}_3$  and HCN
  - d. Hydrogen fluoride assessment
4. Quality Assurance Summary
5. Appendices containing the following information:
  - a. all fenceline monitoring conducted [that done in response to FTIR alarms or for any other reason as well as routine 4-hr monitoring], and the actual time of measurement for each confirmatory Draeger tube measurement.
  - b. tabulation of the following information for each occasion when the 5 minute averaged FTIR  $\text{PH}_3$  measurement on any leg of any pond exceeded 1.0 ppm: date, time, concentration, wind speed and direction, and location of such measurements; and the time fenceline monitoring in response to the event was initiated.
  - c. tabulation of the following items for each occasion when off-site gas monitoring was performed:
    - i. Date, time, concentration, analytical method, wind speed and direction, nature of trigger or event that warranted off-site gas monitoring (e.g., FTIR alarm, routine four hour surveillance monitoring, or levels reported by persons working near the ponds) and location of measurement(s) triggering off-site gas monitoring
    - ii. Off-site monitoring data, including location, time, analytical method and concentration for each measurement taken in response, and
    - iii. Description of any and all actions taken in response, including the date and time each action was taken.
  - d. tabulation of all occasions during the quarter when fence-line monitoring in response to an FTIR alarm indicating an exceedance of the threshold values of 1.00 ppm  $\text{PH}_3$  or 10 ppm HCN was **not** conducted, specify the reason(s) Astaris did not initiate monitoring, and describe measures taken to prevent the recurrence.



**Pond 18 Cell A Closure Plan Approval**  
**December 31, 2001**

**CONCURRENCES:**

INITIALS	<i>mm</i>	<i>GB</i>	<i>Hand</i>		POLICY	PRECIS INFO SUBMITTED			
NAME	Meyer	Burges	Boyd		YES	NO	YES	NO	X
DATE	12/31/01	1/2/02	1/2/02		IF YES, BCC ATTACHED				

**PEER REVIEW:**

INITIALS						
NAME	Palumbo	Fisher	Brown	Orlean	Hedeen	
DATE						

bcc: Andy Boyd, ORC  
Sylvia Burges, RCRA Compliance  
Mark Masarik, IOO  
Gil Haselberger, OEC